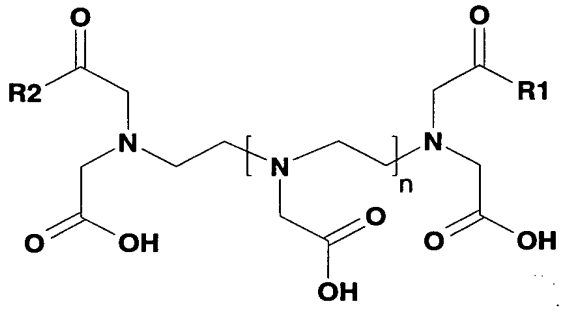
Am ndments to th Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

11. (Currently amended) A compound of Formula I:

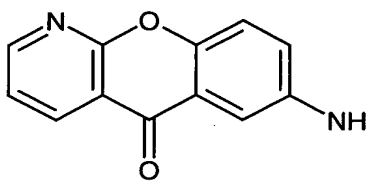


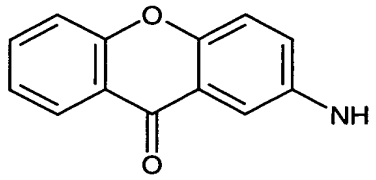
I

wherein:

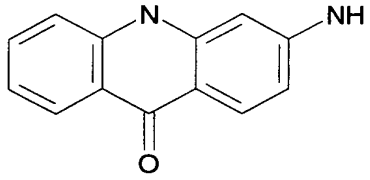
$[\backslash N/\backslash]_n$ is a chelator selected from the group consisting of: diethylenetriaminepentaacetic acid (DTPA),wherein n= 1 in Formula I, triethylenetetraaminehexaacetic acid (TTHA), wherein n=2 in Formula I, and a polycarboxylate derivative of DTPA or TTHA, which chelates a lanthanide metal cation;

R1 is a phenone selected from the following group:

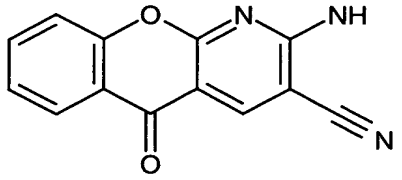




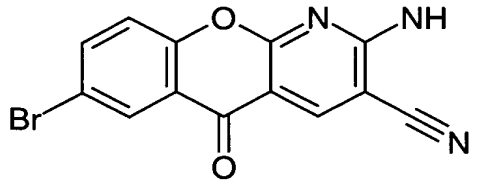
7AAX



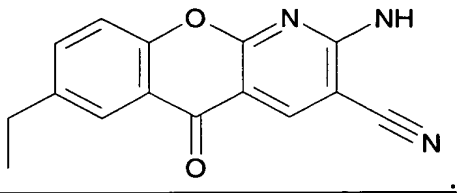
2AX



3AAC



2ACAX

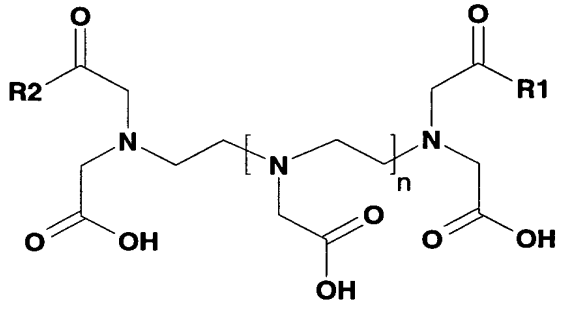


2ACBAX 2ACEAX; and

R2 is selected from the group consisting of: OH, $NH(CH_2)_nOH$, $NH(CH_2)_nNH_2$, $NH(CH_2)_nPhNH_2$, $NH(CH_2)_nPhOH$, $NHCH(CO_2H)CH_2PhNH_2$,, $NH(CH_2)_nPhNCS$; wherein n is 1-6.

Claims 12-16 (Canceled)

17. (Previously presented) A method for using a compound of Formula I:



I

wherein:

$[\backslash N\Lambda]_n$ is a chelator selected from the group consisting of: diethylenetriaminepentaacetic acid (DTPA),wherein n= 1 in Formula I, triethylenetetraaminehexaacetic acid (TTHA), wherein n=2 in Formula I, and a polycarboxylate derivative of DTPA or TTHA, which chelates a lanthanide metal cation;

R1 is a phenone; and

R2 is selected from the group consisting of: OH, $NH(CH_2)_nOH$, $NH(CH_2)_nNH_2$, $NH(CH_2)_nPhNH_2$, $NH(CH_2)_nPhOH$, $NHCH(CO_2H)CH_2PhNH_2$,, $NH(CH_2)_nPhNCS$; wherein n is 1-6;

in fluorescence detection-based techniques or bioassays comprising the steps of:

a. labelling an aliquot comprising donor biomolecules selected from the group consisting of: peptides, proteins, deoxyribonucleic acids (DNAs), ribonucleic acids (RNAs), enzyme substrates, and ligand molecules with a compound of Formula I by a linking reaction with linker R2 to provide a labelled biomolecule assay sample;

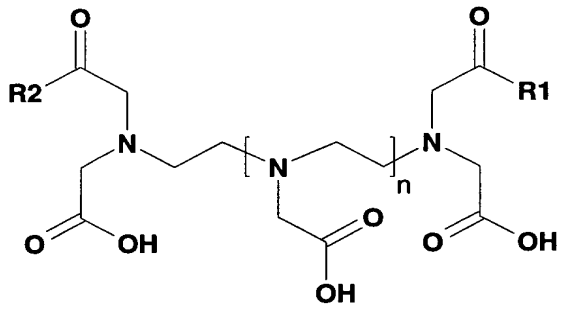
b. adding a suitable amount of a suitable organic dye to the labelled biomolecule assay sample;

c. exciting the labelled biomolecule assay sample in a suitable fluorescence instrument to provide a fluorescense emission for quantitation.

18. (Previously presented) A method according to Claim 17 wherein said organic dye is selected from the group consisting of: rhodamine, allophycocyanin (APC) and indodicarbocyanin (CY-5).

19. (Currently amended) A kit for fluorescence detection-based techniques or bioassays comprising:

a. a suitable amount of a compound of Formula I



I

wherein:

[\N/\]$_n$ is a chelator selected from the group consisting of: diethylenetriaminepentaacetic acid (DTPA),wherein n= 1 in Formula I, triethylenetetraaminehexaacetic acid (TTHA), wherein n=2 in Formula I, and a polycarboxylate derivative of DTPA or TTHA, which chelates a lanthanide metal cation;

R1 is a phenone; and

R2 is selected from the group consisting of: OH, $NH(CH_2)_nOH$, $NH(CH_2)_nNH_2$, $NH(CH_2)_nPhNH_2$, $NH(CH_2)_nPhOH$, $NHCH(CO_2H)CH_2PhNH_2$, $NH(CH_2)_nPhNCS$; wherein n is 1-6 ~~according to Claim 11~~; and

b. a suitable amount of organic dye.

20. (Previously presented) A kit according to Claim 19 wherein said organic dye is selected from the group consisting of: rhodamine, allophycocyanin (APC) and indodicarbocyanin (CY-5).

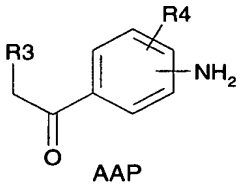
21. (New) A compound according to Claim 11 wherein R3 and R4 are independently selected from the group consisting of: H, OH, NH_2, $COCH_3$, COPh, OPh, NHPh, CN, NO_2, CO_2H, and CO_2CH_3.

22. (New) A compound according to Claim 11 wherein $[\backslash N/\backslash]_n$ is DTPA,wherein n= 1 in Formula I.

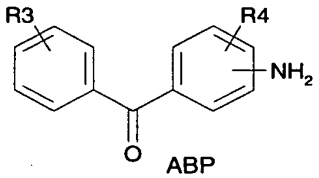
23. (New) A compound according to Claim 11 wherein the lanthanide metal cation is selected from the group consisting of: Tb III, Eu III, Sm III, and Dy III.

24. (New) A compound according to Claim 23 wherein the lanthanide metal cation is selected from the group consisting of: Eu III or Tb III.

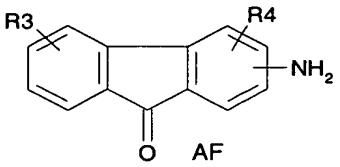
25. (New) A method according to Claim 17 wherein the phenone is selected from the group consisting of: aminoacetophenones (AAP), aminobenzophenones (ABP), aminofluorenones (AF), aminoxantones (AX), amino-azaxanthones (AAX), aminoanthraquinones (AAQ), and aminoacridones (AAC):



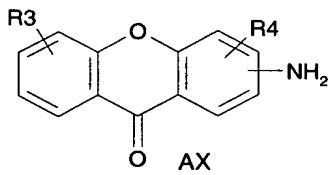
AAP



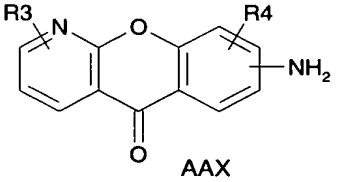
ABP



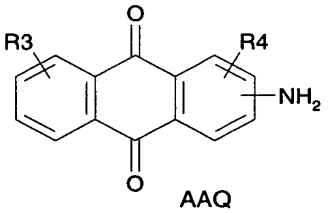
AF



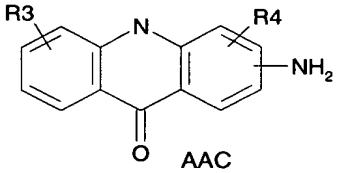
AX



AAX



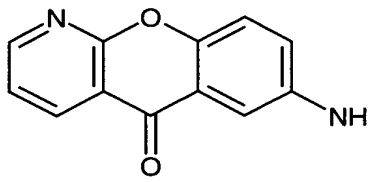
AAQ

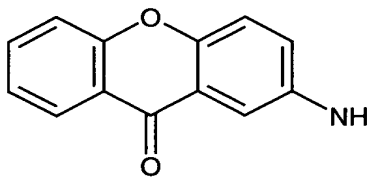


AAC

wherein R3 and R4 are independently selected from the group consisting of: H, OH, NH_2, $COCH_3$, COPh, OPh, NHPh, CN, NO_2, CO_2H, and CO_2CH_3.

26. (New) A method according to Claim 17 wherein the phenone is selected from the following group:





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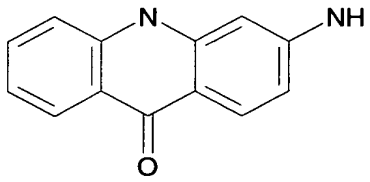
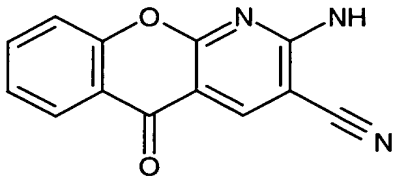
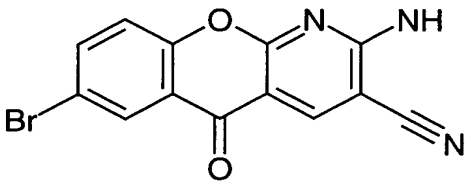


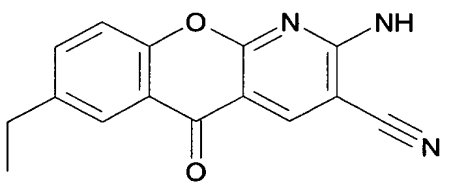
2AX



3AAC



2ACAX

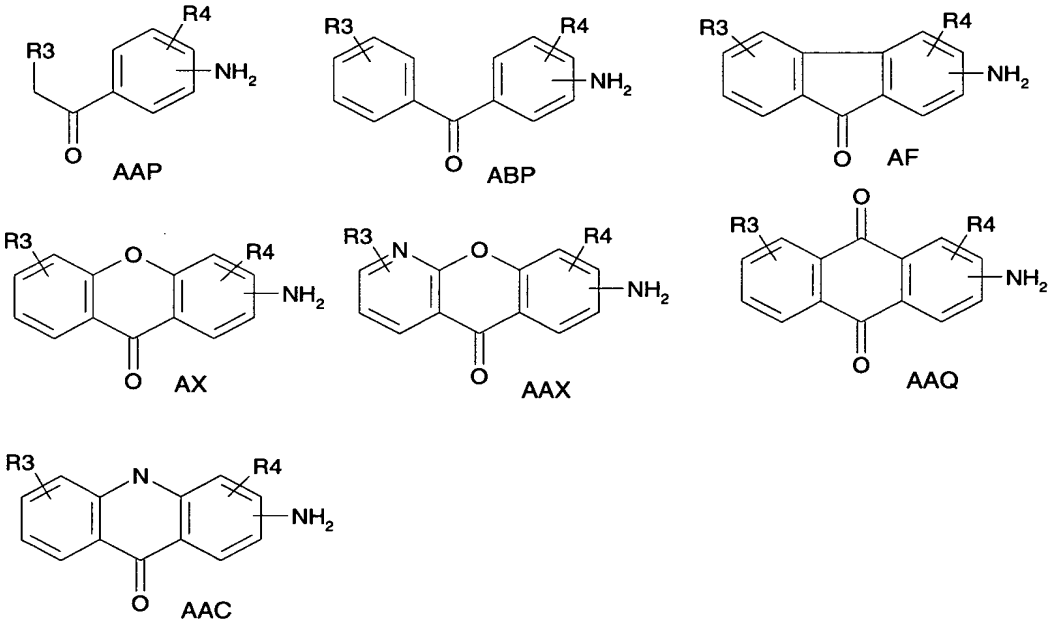


27. (New) A method according to Claim 17 wherein $[\backslash N/\backslash]_n$ is DTPA,wherein n= 1 in Formula I.

28. (New) A method according to Claim 17 wherein the lanthanide metal cation is selected from the group consisting of: Tb III, Eu III, Sm III, and Dy III.

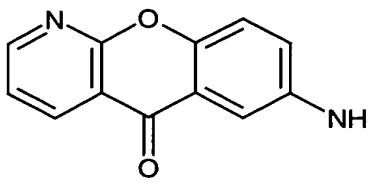
29. (New) A method according to Claim 28 wherein the lanthanide metal cation is selected from the group consisting of: Eu III or Tb III.

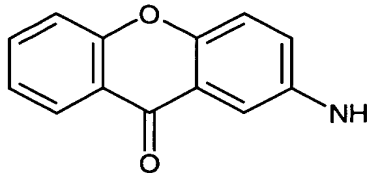
30. (New) A kit according to Claim 19 wherein the phenone is selected from the group consisting of: aminoacetophenones (AAP), aminobenzophenones (ABP), aminofluorenones (AF), aminoxantones (AX), amino-azaxanthones (AAX), aminoanthraquinones (AAQ), and aminoacridones (AAC):



wherein R3 and R4 are independently selected from the group consisting of: H, OH, NH_2, $COCH_3$, COPh, OPh, NHPh, CN, NO_2, CO_2H, and CO_2CH_3.

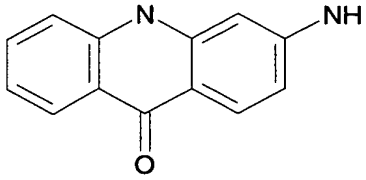
31. (New) A kit according to Claim 19 wherein the phenone is selected from the following group:

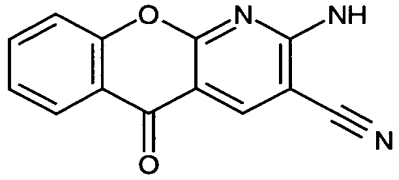




7AAX

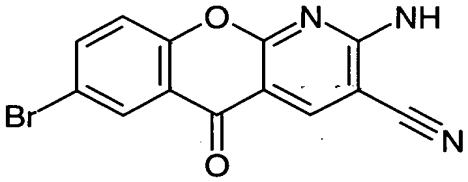
2AX

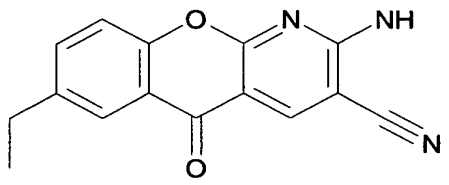




3AAC

2ACAX





2ACBAX

2ACEAX

32. (New) A kit according to Claim 19 wherein $[\backslash N/\backslash]_n$ is DTPA,wherein n= 1 in Formula I.

33. (New) A kit according to Claim 19 wherein the lanthanide metal cation is selected from the group consisting of: Tb III, Eu III, Sm III, and Dy III.

34. (New) A kit according to Claim 33 wherein the lanthanide metal cation is selected from the group consisting of: Eu III or Tb III.